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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/846,067	04/30/2001	Rahul Sharma	SUNMP007	4516

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MARTINE PENILLA & GENCARELLA, LLP
710 LAKEWAY DRIVE
SUITE 200
SUNNYVALE, CA 94085

EXAMINER

DAO, THUY CHAN

ART UNIT	PAPER NUMBER
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2192

DATE MAILED: 06/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/846,067	SHARMA ET AL.	
	Examiner	Art Unit	
	Thuy Dao	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6-8 and 10-20 is/are pending in the application.
- 4a) Of the above claim(s) 2,5 and 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6-8 and 10-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the amendment filed on April 27, 2006.
2. Claims 1, 3-4, 6-8, 10-20 have been examined. Claims 1, 8, and 15 are independent claims.

Response to Arguments

3. The Applicant is thanked for thought-out reply. Applicant's arguments filed on April 27, 2006 have been fully considered.

a) The Applicants asserted, *"Therefore, to say that the business logic is stored within the entity bean is to say nothing new and, moreover, such a statement is logically and scientifically irrelevant to a JAVA module including at least one original entity bean and at least one original state object in communication with the original entity bean where the original state object stores a state of the original entity bean, as recited in the claimed invention"* (emphasis added by Applicants, Remarks, page 8, lines 16-21).

The Examiner respectfully disagrees with these assertions. Claim 1, lines 4-5, specifically recites limitations "...the JAVA module includes at least one **original entity bean** and at least one original state object...". It is the Examiner's duty to show that Nally explicitly discloses *the JAVA module* (an Enterprise JavaBeans EJB) *includes at least one original entity bean and at least one original state object* (Office Action mailed February 24, 2006, page 9, lines 11-30).

b) The Applicants asserted, *"Applicants cannot find the relevance of version status data, as taught by Nally, in the context of the claimed invention..."* (Remarks, page 9, lines 4-5).

The Examiner respectfully disagrees with these assertions. Claim 1, lines 5-6, recites "...at least one **original state object** in communication with the original entity bean, the original state object storing a state of the original entity bean".

Nally discloses *at least one original state object* (FIG. 5, Version Status Data 530, col.13: 29-34) *in communication with the original entity bean* (FIG. 5,

Art Unit: 2192

communicating with Entity Bean 520, col.13: 34-44), *the original state object storing a state of the original entity bean* (col.14: 21-39).

4. After closer consideration of the prior art Nally, the Examiner establishes new grounds of rejection 35 USC 102 as set forth below.

Therefore, the finality of the last Office Action mailed February 24, 2006 is withdrawn.

Specification

5. The disclosure is objected to because of the following informalities: in page 4, line 18, the phrase "*the order of five 9's*" should be explained in more details.

Appropriate correction is required.

Claim Rejections – 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 3-4, 6-8, and 10-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Nally (art of record, US Patent No. 6,298,478).

Claim 1:

Nally discloses *a method for upgrading managed state for a JAVA based application* (e.g., col.10: 10-21 and 36-45) *comprising:*

executing a JAVA module on a server (an Enterprise JavaBeans EJB, col.1: 43-49), wherein the JAVA module is in a middle-tier between a client browser and databases (e.g., col.9: 5-22),

the JAVA module includes at least one original entity bean (e.g., FIG. 5, Entity Bean 520, col.13: 14-20) and at least one original state object (e.g., FIG. 5, Version Status Data 530, col.13: 29-34) in communication with the original entity bean (e.g., col.13: 34-54),

the original state object storing a state of the original entity bean (e.g., col.14: 21-39);

generating an upgraded state object, the JAVA module including the upgraded state object (e.g., FIG. 5, generating a Version Status Data of Entity Bean 521 or 522, col.13: 56-65; the JAVA module (EJB 500) still includes the upgraded state object (Version Status Data)),

wherein the upgraded state object is generated by upgrading a physical schema (e.g., FIG. 4, the Version Status Data of Entity Bean 521 or 522 is generated by allocating physical memory space in a transaction tree 400, col.10: 46-65; col.11: 16-24) using data stored in a repository that is part of the databases (e.g., col.11: 16-24, col.14: 7-12, col.13: 60-65, col.10: 35-45);

transferring the state stored in the original state object to the upgraded stated object (e.g., FIG. 4, col.14: 2-12), wherein the original state object is upgraded in the JAVA module (e.g., Version Status Data 530 of Entity Bean 520 and that of Entity Bean 521, 522 are generated, upgraded, and deleted in EJB 500, col. 14: 21-39);

generating an upgraded entity bean using data stored in the system repository (e.g., FIG. 5, generating Entity Bean 521 or 522 from original Entity Bean 520, col.13: 56-65); and

providing state management for an original entity bean using the upgraded state object (e.g., col.14: 21-39).

Claim 3:

The rejection of base claim 1 is incorporated. Nally also discloses *the operation of managing the stated of the upgraded entity bean using the upgraded state object* (e.g., col.14: 21-61).

Claim 4:

The rejection of intervening claim 3 is incorporated. Nally also discloses *both the original entity bean and the original state object are disabled* (e.g., EJB Object 510 dynamically determines the current transaction, connects to it, and disable both Entity Bean 520 and Version Status Data 530, col.14: 12-20; col.15: 10-16).

Claim 6:

The rejection of intervening claim 4 is incorporated. Nally also discloses *functionality of the JAVA module is not disrupted when the upgraded state object is generated* (e.g., FIG. 5, functionality of EJB 500 is not disrupted, col.13: 29-44).

Claim 7:

The rejection of intervening claim 4 is incorporated. Nally also discloses *functionality of the JAVA application is not disrupted when the JAVA module is upgraded* (e.g., FIG. 4, functionality of transaction tree 400 is not disrupted, col.10: 10-45; col.10: 48 – col.13: 12).

Claim 8:

Nally discloses *a JAVA platform capable of performing an online upgrade on a JAVA application* (e.g., col.10: 10-21 and 36-45), *the JAVA platform comprising:*

a JAVA module is in a middle tier between a client browser and databases (e.g., an Enterprise JavaBeans EJB, col.1: 43-49; col.9: 5-22),

the JAVA module includes at least one original entity bean (e.g., FIG. 5, Entity Bean 520, col.13: 14-20) *and at least one original state object* (e.g., FIG. 5, Version Status Data 530, col.13: 29-34) *in communication with the original entity bean* (e.g., col.13: 34-54), *wherein the original state object storing a state of the original entity*

bean (e.g., col.13: 34-54), and wherein the state object provides state management for the original entity bean (e.g., col.14: 21-39); and

a repository that is part of the databases (e.g., col.11: 16-24, col.14: 7-12, col.13: 60-65, col.10: 35-45, col.11: 16-24) and

having upgraded class files for the original entity bean (e.g., FIG. 5, Entity Bean 521 or 522 is an instance of upgraded class files) and

upgraded class files for the original state object (e.g., FIG. 5, the Version Status Data of Entity Bean 521 or 522 is an instance of upgraded class files),

wherein the original state object is upgraded by generating an upgraded state object, the JAVA module including the upgraded state object (e.g., generating Version Status Data of Entity Bean 521 or 522, col.13: 56-65; the JAVA module (EJB 500) still includes the upgraded state object (the Version Status Data of Entity Bean 521 or 522)),

using upgraded class files from the repository, and transferring the state stored in the original state object to the upgraded state object (e.g., FIG. 4, col.14: 2-12) wherein the original state object is upgraded in the JAVA module (e.g., Version Status Data 530 of Entity Bean 520 and that of Entity Bean 521, 522 are generated, upgraded, and deleted in EJB 500, col. 14: 21-39); and

and upgrade entity bean is created using data from the repository as the JAVA platform is upgraded (e.g., Entity Bean 521 or 522 is created using data from the persistent store within the transaction tree 400, col.14: 25-36; col.13: 56-65).

Claims 10-11 and 13-14:

The rejection of base claim 8 is incorporated. Claims 10-11 and 13-14 are JAVA platform versions, which recite the same limitations as those of claims 3-4 and 6-7, wherein all the claimed limitations have been addressed/set forth above. Therefore, as the reference teaches all of the limitations of the above claims, it also teaches all of the limitations of claims 10-11 and 13-14.

Claim 12:

The rejection of base claim 8 is incorporated. Nally also discloses *the upgraded state object is generated by upgrading a physical schema using data stored in the repository* (e.g., col.11: 16-24, col.14: 7-12, col.13: 60-65, col.10: 35-45).

Claim 15:

Nally discloses *a method for upgrading a JAVA based application having a managed application state*, (e.g., col.10: 10-21 and 36-45) *comprising the operations of:*
executing a JAVA module on a server (executing an Enterprise JavaBeans EJB, col.1: 43-49), *wherein the JAVA module is in a middle tier between a client browser and databases* (e.g., col.9: 5-22),

the JAVA module includes at least one original entity bean (e.g., FIG. 5, Entity Bean 520, col.13: 14-20) *and at least one original state object* (e.g., FIG. 5, Version Status Data 530, col.13: 29-34) *in communication with the original entity bean* (e.g., col.13: 34-54),

the original state object storing a state of the original entity bean (e.g., col.14: 21-39);

generating an upgraded state object, the JAVA module including the upgraded state object (e.g., FIG. 5, generating a Version Status Data of Entity Bean 521 or 522, col.13: 56-65; *the JAVA module (EJB 500) still includes the upgraded state object (Version Status Data)*)

using data stored in a system repository that is part of the databases (e.g., col.11: 16-24, col.14: 7-12; col.13: 60-65; col.10: 35: 45);

transferring the state stored in the original state object to the upgraded stated object (e.g., FIG. 4, col.14: 2-12), *wherein the original state object is upgraded in the JAVA module* (e.g., col. 14: 21-39);

providing state management for an original entity bean using the upgraded state object (e.g., col.14: 21-39),

generating an upgraded entity bean using data stored in the system repository (e.g., FIG. 5, generating Entity Bean 521 or 520 from original Entity Bean 520, col.13: 56-65);

providing state management for the upgraded entity bean using the upgraded state object (e.g., col.14: 21-39); and

disabling both the original entity bean and the original state object (e.g., EJB Object 510 dynamically determines the current transaction, connects to it, and disable both Entity Bean 520 and Version Status Data 530, col.14: 12-20; col.15: 10-16).

Claims 16-18:

The rejection of base claim 15 is incorporated. Claims 16-18 are method versions, which recite the same limitations as those of claims 12-14, wherein all the claimed limitations have been addressed/set forth above. Therefore, as the reference teaches all of the limitations of the above claims, it also teaches all of the limitations of claims 16-18.

Claim 19:

The rejection of intervening claim 18 is incorporated. Nally also discloses *the original state object and the upgraded state object are respectively classified into a particular state management unit (e.g., col.13: 29-44).*

Claim 20:

The rejection of intervening claim 19 is incorporated. Nally also discloses *the state management unit is used to facilitate upgrading of the original state object (e.g., col.13; 29-44, col.14; 21-61).*

Conclusion

7. Any inquiry concerning this communication should be directed to examiner Thuy Dao (Twee), whose telephone is (571) 272 8570. The examiner can normally be reached on Monday – Friday from 6:30AM to 3:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam, can be reached at (571) 272 3695.

Art Unit: 2192

The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is (571) 272 2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. -
-For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

T. Dao



TUAN DAM
SUPERVISORY PATENT EXAMINER